

DISCLOSURE OF THE ABSTRACT

Disclosed is a copolymer prepared from a conjugated diene monomer and a vinyl aromatic monomer. The radial copolymer is prepared by coupling the terminal of a leaving polymer using a mixed coupling agent comprising the mixture of a multi-reactive polysiloxane and a tin halide compound, the leaving polymer being prepared by copolymerizing a conjugated diene monomer and a vinyl aromatic monomer in the presence of an organo lithium catalyst and a hydrocarbon solvent. The use of the radial copolymer improves the affinity to silica or carbon black used as a filler, and remarkably enhances processibility in the manufacture of tires as well as the properties (e.g., higher wet traction, lower rolling resistance, and higher tread wear) necessary for tires relative to the conventional products.